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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,197	05/11/2001	Atsushi Inagaki	1232-4714	5889

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EXAMINER	
MISLEH, JUSTIN P	
ART UNIT	**PAPER NUMBER**
2622	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/853,197	INAGAKI, ATSUSHI	
	Examiner	Art Unit	
	Justin P. Misleh	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 June 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 5, 7 - 12, and 14 - 17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 5, 7 - 12, and 14 - 17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 20, 2007 has been entered.

Response to Arguments

2. Applicant's arguments filed June 20, 2007 have been fully considered but they are not persuasive.

3. Applicant argues, "However, it appears that the determination of which mode of reading operation is used in Misawa depends on whether the external display device is attached or not, i.e., it does not depends on whether the display device is ON or OFF state as required by the present invention. In other words, in Misawa, the changing of the reading manner is based on the connection state of the external monitor to the video output terminal of the digital camera, and is not based on the ON-OFF state of the external monitor or the LCD monitor."

4. The Examiner respectfully disagrees with Applicant's position. The claim language requires, in Claim 1, "determines whether said image display device is in an image display ON state, or said image display device is in an image display OFF state". Such claim language does not necessarily mean that no power is provided/accepted to/by the display device in an image

display OFF state and that power must be provided/accepted to/by the display device in an image display ON state. Rather, image display ON state appears to correspond to when an image is displayed and image display OFF state appears to correspond to when an image is not displayed.

5. However, Applicant additionally argues, "As Applicant understand it, even in the normal operation mode of Misawa in which the external display device is not attached, a display device is still operated ... It appears that the display device displays the image in the normal mode operation of Misawa."

6. Again, the Examiner respectfully disagrees with Applicant's position. In the Office Action, the Examiner clearly referred to the "external image display apparatus" connected via output means 41 to correspond to the claimed "image display device". Therefore, it is irrelevant what operation the LCD 40 performs.

7. Furthermore, the Examiner considered the situation when the external image display apparatus is connected to the output means (41) to correspond to the image display ON state. Likewise, the Examiner also considers the situation when the external image display apparatus is not connected to the output means (41) to correspond to the image display OFF state.

8. According to Applicant, "Other independent claims (i.e., claims 8, 15 and 17) recite similar features to claim 1." Thus, for these reasons given above, each of independent Claims 1, 8, 15, and 17 is believed anticipated by Misawa.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. **Claims 1 – 3, 5, 8 – 10, 12, and 15 – 17** are rejected under 35 U.S.C. 102(e) as being anticipated by Misawa (US 6,700,607 B1).

The Examiner notes Claims 1 – 3 and 8 – 10 are respective corresponding apparatus and method claims. Accordingly, they will be rejected together, respectively.

11. For **Claims 1 and 8**, Misawa discloses, as shown in figures 1 – 5, an image sensing apparatus, comprising:

an image sensor that outputs an image signal of a subject (28 – figure 5);

an image display device that displays an image based on said image signal obtained by said image sensor ("external image display apparatus" connected via output means 41; see column 9, lines 17 – 23), said image display device being arranged on said image sensing apparatus (output means 41 is arranged on the image sensing apparatus; therefore, whatever is connected to the output means 41 is also arranged on the image pickup apparatus);

a display designating unit (CPU 48 – figure 5) that determines whether or not said image display device ("external image display apparatus") is in an image display ON state ("detector detects the connection …"; see column 9, lines 31 and 32), or said image display device ("external image display apparatus") is in an image display OFF state (image display ON state appears to correspond to when an image is displayed and image display OFF state appears to correspond to when an image is not displayed);

a focus evaluating value ("AF unit") obtaining device that obtains a focus evaluating value for adjusting a focus based on said image signal obtained by said image sensor (see column 7, lines 35 – 42), said image signal (see column 7, lines 26 – 34) read from image sensor (28) in reading manners ("normal image-capturing mode" and "macro image-capturing mode"; see column 7, lines 55 – 64 and column 8, lines 28 – 44) which are changed in according to the determination of said display designating unit (CPU 48; see column 9, lines 23 – 35 and 53 – 57, and column 10, lines 23 – 34); and

a control unit (CPU 48 – figure 5) that adjusts the focus according to the focus evaluating value obtained from said focus evaluating value obtaining device (see column 9, lines 23 – 35 and 53 – 57, and column 10, lines 23 – 34).

12. For **Claim 15**, Misawa discloses, as shown in figures 1 – 5, a storage medium (CPU 48 – figure 5) in which a control program for controlling an image sensing apparatus is stored, wherein said control program comprising codes that, when executed, causes a computer to carry out the steps of an image sensing apparatus (see column 8, lines 26 – 34 and 43 – 50), comprising:

a code of an image sensing step that outputs an image signal of a subject (28 – figure 5);

a code of an image display step that displays an image based on said image signal obtained by said image sensor ("external image display apparatus" connected via output means 41; see column 9, lines 17 – 23), said image display device being arranged on said image sensing apparatus (output means 41 is arranged on the image sensing apparatus; therefore, whatever is connected to the output means 41 is also arranged on the image pickup apparatus);

a code of a display designating step (CPU 48 – figure 5) that determines whether or not said image display device ("external image display apparatus") is in an image display ON state ("detector detects the connection ..."; see column 9, lines 31 and 32), or said image display device ("external image display apparatus") is in an image display OFF state (image display ON state appears to correspond to when an image is displayed and image display OFF state appears to correspond to when an image is not displayed);

a code of a focus evaluating value ("AF unit") obtaining step that obtains a focus evaluating value for adjusting a focus based on said image signal obtained by said image sensor (see column 7, lines 35 – 42) said image signal (see column 7, lines 26 – 34) read from image sensor (28) in reading manners ("normal image-capturing mode" and "macro image-capturing mode"; see column 7, lines 55 – 64 and column 8, lines 28 – 44) which are changed in according to the determination of said display designating unit (CPU 48; see column 9, lines 23 – 35 and 53 – 57, and column 10, lines 23 – 34); and

a code of a control step (CPU 48 – figure 5) that adjusts the focus according to the focus evaluating value obtained from said focus evaluating value obtaining device (see column 9, lines 23 – 35 and 53 – 57, and column 10, lines 23 – 34).

13. As for **Claims 2 and 9**, Misawa discloses, as shown in figures 1 – 5, wherein said reading manners include to read said image signal from a portion of said image sensor (see figures 3 and 4 for "normal image-capturing mode" and figures 1 and 2 for "macro image-capturing mode"), and the portion includes a focusing signed detecting area (see column 8, lines 13 – 19).

14. As for **Claims 3, 10, and 16**, Misawa discloses, as shown in figure 9, wherein said reading manners includes to read said image signal ("reading area") from a display region

("display area") of said image sensor ("imaging area") when said display designating unit (CPU 48) determines that said image signal is displayed by said image display device while said image sensing apparatus photographs said image signal (see column 9, lines 47 – 51).

15. As for **Claims 5 and 12**, Misawa discloses, as stated in column 9 (lines 31 and 32), that the detector (CPU 48) detects the connection to an external monitor (via Image Output 41). Furthermore, Misawa discloses, as shown in figure 5, that the image signal is passed to the external monitor (via Image Output 41) only after the Digital Signal Processing Part (34 – figure 5) has processed the image signal. Accordingly, the circuit arrangement inherently prohibits the image signal from being displayed on the external monitor prior to the completion of processing and when no connection to the external monitor exists. Furthermore, the Examiner considers "while image sensing apparatus photographs said sensed image signal" to correspond to the image signal's passage through the entire circuit of figure 5 (i.e., from image capture to image display/storage).

Therefore, Misawa discloses a display prohibiting device (figure 5) that prohibits display of said image by said image display device ("external monitor") at least until photographing processing is completed (Processing Part 34) if said display designating unit (CPU 48) determines that said image is displayed by said image display device while said image sensing apparatus photographs said sensed image signal.

16. For **Claim 17**, Misawa discloses, as shown in figures 1 – 5, an image sensing apparatus, comprising:

an image sensor (28 – figure 5);

a display configured to display images based on said image signal obtained by said image sensor ("external image display apparatus" connected via output means 41; see column 9, lines 17 – 23);

a designation unit (CPU 48 – figure 5) configured to determine whether or not said display ("external image display apparatus") is in an image display ON state ("detector detects the connection ..."; see column 9, lines 31 and 32), or said image display device ("external image display apparatus") is in an image display OFF state (image display ON state appears to correspond to when an image is displayed and image display OFF state appears to correspond to when an image is not displayed);

a calculating unit (CPU 48) configured to calculate a focus evaluating value for focus adjustment based on said image signal (see column 7, lines 35 – 42);

wherein said calculation unit (CPU 48) calculates the focus evaluating value using a portion of the image signal (see column 7, lines 26 – 34) when said display is in an image display OFF state (see column 9, lines 23 – 35 and 53 – 57, and column 10, lines 23 – 34) that does not display the image on the display (image display ON state appears to correspond to when an image is displayed and image display OFF state appears to correspond to when an image is not displayed).

The Examiner considers the claimed "image display ON state" to correspond to a situation when Misawa detects connection to an external monitor (see column 9, lines 31 and 32). Accordingly, the Examiner considers the claimed "image display OFF state" to correspond to a situation when Misawa does not detect a connection the external monitor (see column 9, lines 31 and 32). When connected to the external monitor, Misawa places the image sensing

apparatus in the "macro image-capturing mode" where ½ the pixels are read out (see figures 1 and 2) or all the pixels are readout. When not connected to the external monitor, Misawa place the image sensing apparatus in the "normal image-capturing mode" where ¼ or 1/8 of the pixels readout (see figures 3 and 4). Clearly, when in an image display OFF state less pixels are readout than in an image display ON state.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

18. **Claims 4, 7, 11, and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Misawa (US 6,700,607 B1).

The Examiner notes Claims 4/11 and 7/14 are respective corresponding apparatus and method claims. Accordingly, they will be rejected together, respectively.

19. As for **Claims 4 and 11**, Misawa discloses, as stated in column 7 (lines 41 an 42), "a known focusing means such as an AF sensor may also be used"; but does not necessarily specify wherein said focus evaluating value is obtained based on a high frequency component of said image signal obtained by said image sensor, as claimed.

However, **Official Notice** (MPEP § 2144.03) is taken that both the concepts and advantages of obtaining a focus evaluating value based on a high frequency component of an image signal obtained by an image sensor are well known and expected in the art. At the time

the invention was made, it would have been obvious to one with ordinary skill in the art to have obtained said focus evaluating value based on a high frequency component of said image signal obtained by said image sensor for the advantage of *performing focusing based upon fine image detail and feature edges.*

20. As for **Claims 7 and 14**, Misawa controlling the image sensing apparatus by means of a CPU (48 – figure 5); although Misawa does not specifically disclose wherein determination by said display designating unit is stored in a memory as an image display flag.

However, **Official Notice** (MPEP § 2144.03) is taken that both the concepts and advantages of storing information regarding image sensing apparatus operations and conditions as flags in a memory are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have designation by said display designation unit/step is stored in a memory as an image display flag for the advantage of *providing a readily upgradeable method of operation.*

Conclusion

21. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lin Ye can be reached on 571.272.7372. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Justin Misleh
Examiner, GAU 2622
August 28, 2007